Mumps Outbreak-Related Questions and Answers for Patients

1) I got the vaccine but still got mumps. Does this mean the vaccine doesn't work? The MMR vaccine is very effective against measles, mumps, and rubella, but it is not perfect. MMR vaccine reduces the risk of getting mumps, especially if you get two doses. People who have received two doses of the MMR vaccine are about 9 times less likely to get mumps than unvaccinated people who have the same exposure to mumps virus. However, some people who received two doses of MMR can still get mumps, especially if they have an intense exposure to the mumps virus. If they do get mumps, people who have been vaccinated are likely to have less severe illness than unvaccinated people with mumps.

Before there was a vaccine against mumps, mumps was a common childhood disease in the United States, and in some cases, the disease caused complications, such as permanent deafness in children and, occasionally, swelling of the brain (encephalitis), which can result in death, although very rarely. Now, there are normally only a few hundred cases of mumps every year. However, outbreaks occur sometimes and involve a higher number of cases. In 2006, there was an outbreak affecting more than 6,000 people in the United States, with many cases occurring on college campuses. In 2009, an outbreak started in a close-knit religious communities and schools in the Northeast, resulting in more than 2,500 cases. These outbreaks have shown that when people who are sick with mumps have close contact with a lot of other people (such as among students living in dormitories and students and families in close-knit communities) mumps can spread even among vaccinated people.

The MMR vaccine also protects against measles and rubella (German measles). Before there was a vaccine to protect against these diseases, millions of people got measles every year, and hundreds died. Now in the United States, less than 100 people get measles each year. Before the MMR vaccine, rubella was also a common infection in the United States. As part of a worldwide epidemic, in the United States in 1964-65, 20,000 babies were born with serious birth defects because their mothers were infected with rubella. Now in the United States, cases of rubella and its related birth defects are extremely rare. For both measles and rubella, cases in the United States usually occur when people bring the disease in from other countries and spread it to other people who haven't been vaccinated.

2) Is mumps a serious disease?

Most people with mumps fully recover after a few weeks. While infected with mumps, many people feel tired and achy, have a fever, and may have swelling of the salivary glands on the side of the face. Others may feel extremely ill and be unable to eat because of pain around the jaw, and a few will develop serious complications. Men and adolescent boys can develop pain or swelling in their testicles, which rarely results in sterility. Inflammation of the protective membranes covering the brain and spinal cord (meningitis) and loss of hearing can also occur, and in rare cases this hearing loss can be permanent. The most serious complication is inflammation of the brain (encephalitis), which can lead to death or permanent disability.

3) I've been told that I need to stay away from people while I'm sick with mumps; what does that mean and why does it matter?

When you have mumps, you should avoid close and prolonged contact with other people until at least 5 days after your glands begin to swell because you are contagious during this time. This means you should stay home when you are sick with mumps. You should not go to work or school. Even at home, you should limit contact with the people you live with; for example, sleep in a separate room by yourself if you can. Staying home while sick with mumps is an important way to avoid spreading the virus to other people. People who are infected with mumps don't get sick right away—it can take 2-4 weeks for them to show signs of infection.

4) Why do mumps outbreaks happen?

Although the vaccine against mumps is very effective, it is not perfect. When the mumps virus is introduced into settings where close contact between people makes it easy for the virus to spread (such as schools and colleges) outbreaks sometimes occur. People who are not vaccinated against mumps have a higher chance of getting the disease and spreading the virus to others.

5) What things should I do during a mumps outbreak?

The two most important things you should do are

- Make sure you are up to date on your MMR vaccine. The MMR vaccine should be routinely given at age 12-15 months, and a second dose should be given at age 4-6 years. If you are not up to date on your MMR vaccine, you should get up to date now. Two doses of MMR vaccine are more effective against mumps than one dose.
- If you do get ill with mumps, avoid close contact with people until at least 5 days after your glands began to swell.

Also remember that in any situation, keeping hands clean is one of the most important steps you can take to avoid getting sick and spreading germs to others. It is best to wash your hands with soap and clean running water for 20 seconds (see the CDC feature Wash Your Hands for tips on proper hand washing; also see Handwashing: Hand Hygiene Saves Lives, and Handwashing eCards). However, if soap and clean water are not available, use an alcohol-based product to clean your hands. Cover your mouth and nose with a tissue when you cough or sneeze, and throw out your used tissue. If you don't have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands (see Cover Your Cough for more information).



